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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/821,052 | 04/08/2004 | Dustin Kirkland | AUS920031009US1 | 9656 |

7590 02/14/2007
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| EXAMINER |
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FIGUEROA, MARISOL

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| ART UNIT | PAPER NUMBER |
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2617

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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| 3 MONTHS | 02/14/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/821,052

Applicant(s)

KIRKLAND ET AL.

Examiner

Marisol Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-11 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-11 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on 11/30/2006. Claims 1, 4-11, and 14-18 are pending in the present application.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 4-11, and 14-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1 and 11** are rejected under 35 U.S.C. 102(b) as being anticipated by GLISIC et al. (US 5,754,541).

Regarding claims 1 and 11, Glisic disclose a method (and computer program product stored in a computer readable medium) for accurately conveying wireless connection availability through a tower in a defined area comprising the steps of:

determining the maximum capacity of the tower; establishing a threshold capacity of the tower (col. 3, lines 46-52; col. 3, line 65 – col. 4, lines 1-6; col. 5, lines 31-44; the base station has an established channel capacity that is the maximum or desired capacity the base station supports, which also describe a threshold capacity);

monitoring the calling activity through the tower by maintaining a constant count of the number of wireless devices that are connected through a specific tower (col. 3, lines 46-52; col. 3, line 65 – col. 4, lines 1-6; col. 5, lines 31-44; col. 5, lines 42-64; col. 7, line 65-col. 8, lines 1-5; col. 9, lines 26-30; the base station monitors continuously the load state of the traffic channel by obtaining a count on the number of active/transmitting terminals in the respective area);

detecting when the calling activity has exceeded the established threshold capacity for that tower (col. 5, lines 35-45; the load state of the traffic channel is compared with the channel capacity C and determines when the current load n of the channel is higher than the channel capacity C); and

broadcasting a connection availability message to wireless devices in the area of the tower based on the detecting calling activity resulting from a maintained count of number of wireless devices connected through a specific tower (col. 3, line 45-48, col. 3, line 65 - col. 4, lines 1-10; col. 5, lines 35-44; col. 6, lines 8-11, and 22-28; the base station sends the terminal equipments information indicating whether the current channel load is lower than, equal to or higher than the channel capacity, for example a reset signal is send to the terminal equipments if the current load n of the channel is higher than the channel capacity C and the terminal with this received information determines if it is able to transmit or not at a particular time).

5. **Claims 4, 5, 10, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over GLISIC et al. in view of HASSLER et al. (US 5,751,795).

Regarding claim 4 and 14, Glisic discloses the method and program product as described in claim 1, but fails to particularly disclose further comprising after said broadcasting step, the steps of receiving and displaying the broadcasted message at a wireless device in the area of the tower.

However, these features are well known in the art and Hassler is evidence of the fact. Hassler teaches a telephone switching system that broadcast information for users, such as

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displayable messages, to telecommunication terminals of a plurality of users. The system forms a broadcasting message to multiple ones of the display terminals to cause the contents to be displayed (Abstract; col. 2, lines 45-59).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Glisic to further include the steps of receiving and displaying the broadcasted message (i.e., network load information) at a wireless device in the area of the tower, as suggested by Hassler, because it would allow a plurality of users to know about the load state of the base station in a clear and reliable way, e.g., displaying information message at the wireless terminals, since it is a well known method for conveying information to users comprising communication terminals.

Regarding claim 5, the combination of Glisic and Hassler disclose the method and program product as described in claims 4, wherein the display of the broadcasted message is a period event on the wireless device that correspond to content of the calling availability through that tower (col. 5, lines 41-44).

Regarding claim 10, Glisic discloses a system for accurately conveying wireless connection availability comprising:

- a telephone tower for use in connecting wireless devices (Fig. 1; i.e., base station);

- a software routine within the telephone tower, said software routine capable of maintaining a count of the number of devices that are connected through the tower (col. 3, lines 46-52; col. 3, line 65 – col. 4, lines 1-6; col. 5, lines 31-44; col. 5, lines 42-64; col. 7, line 65-col. 8, lines 1-5; col. 9, lines 26-30; the base station monitors continuously the load state of the traffic channel by obtaining a count on the number of active/transmitting terminals in the respective area), of detecting when the number of devices connected via the tower exceed a predetermined threshold level (col. 5, lines

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35-45; the load state of the traffic channel is compared with the channel capacity C and determines when the current load n of the channel is higher than the channel capacity C), and of broadcasting a message to wireless devices in the area related to connection availability through that tower (col. 3, line 45-48, col. 3, line 65 - col. 4, lines 1-10; col. 5, lines 35-44; col. 6, lines 8-11, and 22-28; the base station sends the terminal equipments information indicating whether the current channel load is lower than, equal to or higher than the channel capacity, for example a reset signal is send to the terminal equipments if the current load n of the channel is higher than the channel capacity C and the terminal with this received information determines if it is able to transmit or not at a particular time);

a wireless device for use in communicating via the telephone tower (Fig. 1; i.e., terminal equipments).

Glisic, fails to particularly disclose software within the wireless device for receiving and displaying broadcasted message.

However, these features are well known in the art and Hassler is evidence of the fact. Hassler teaches a telephone switching system that broadcast information for users, such as displayable messages, to telecommunication terminals of a plurality of users. The system forms a broadcasting message to multiple ones of the display terminals to cause the contents to be displayed (Abstract; col. 2, lines 45-59).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Glisic to further include software within a wireless device for receiving and displaying the broadcasted message (i.e., network load information), as suggested by Hassler, because it would allow a plurality of users to know about the load state of the base station in a clear

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and reliable way, e.g., displaying information message at the wireless terminals, since it is a well known method for conveying information to users comprising communication terminals.

6. **Claims 6-9 and 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over GLISIC et al. in view of SAUTER et al. (US 2004/0209623 A1).

Regarding claims 6 and 15, Glisic discloses the method and computer program product as described in claims 1 and 11, but Glisic fails to particularly disclose wherein said threshold establishing step further comprises establishing multiple threshold levels.

However, it is well known in the art to establish multiple threshold levels and Sauter is evidence of the fact. Sauter teaches a method that monitors the load condition in the network at regular intervals and comprises two threshold values, i.e., a first lower threshold value and an upper threshold value. The load condition is compared with the thresholds in order to determine the start and end of network congestion (see Fig. 2; abstract; paragraphs [0022], [p.0025]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Glisic in order to establish multiple thresholds levels; as suggested by Sauter, in order for the base station to determine different degrees of loading based on the established thresholds.

Regarding claims 7 and 16, the combination of Glisic and Sauter disclose the method and computer program product as described in claims 6 and 15, Glisic discloses further comprising before said broadcasting step, the step of detecting when the calling activity has exceeded an established threshold capacity level for that tower (col. 4, lines 7-10; col. 5, lines 35-38; the base station compares the current load of the channel (i.e., calling activity) with the channel capacity C and if the current load n is higher than the channel capacity C, a reset signal is supplied to the

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terminal equipments (i.e., broadcast) which is information indicating to the terminal equipments that the current channel load is higher than the channel capacity).

Regarding claims 8 and 17, the combination of Glisic and Sauter disclose the method and computer program product as described in claims 7 and 16, Sauter discloses further comprising the step of determining the closest threshold level that has been exceeded by the calling activity (p.0025; the network establishes a lower load threshold and a higher load threshold, the system continuously monitors the traffic in the network and compare it with the thresholds to determine which threshold the load has exceeded at particular times of the day).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, to modify Glisic in order to include the step of determining the closest threshold level, i.e. lower threshold, that has been exceeded by the calling activity, as suggested by Sauter, in order for the base station to detect when the traffic, i.e. calling activity, in the cell starts increasing when the lower load threshold is exceeded.

Regarding claims 9 and 18, the combination of Glisic and Sauter disclose the method and computer program product as described in claim 8 and 17, Gandhi discloses wherein said broadcasting step comprises broadcasting a calling activity message to wireless device in the area of the tower, the message corresponding to the exceeded threshold level (col. 4, lines 7-10; col. 5, lines 35-38; the base station compares the current load of the channel (i.e., calling activity) with the channel capacity C and if the current load n is higher than the channel capacity C , a reset signal is supplied to the terminal equipments (i.e., broadcast) which is information indicating to the terminal equipments that the current channel load is higher than the channel capacity, additionally the base station sends information indicating that the current load is lower or equal than the channel capacity which could be detected by a lower load threshold as suggested by Sauter).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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